



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

Refer to:
2003/00926

October 31, 2003

Sue Richardson
District Manager
Coos Bay District BLM
1300 Airport Lane
North Bend, OR 97459

Re: Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation on the New River Temporary Breach Project, Coos County, Oregon

Dear Ms. Richardson:

Enclosed is a biological opinion (Opinion) prepared by NOAA's National Marine Fisheries Service (NOAA Fisheries) pursuant to section 7 of the Endangered Species Act (ESA) for the New River Temporary Breach Project, Coos County, Oregon. NOAA Fisheries concludes in this Opinion that the proposed action is not likely to jeopardize Oregon Coast (OC) coho salmon (*Oncorhynchus kisutch*). Pursuant to section 7 of the ESA, NOAA Fisheries has included reasonable and prudent measures with non-discretionary terms and conditions that NOAA Fisheries believes are necessary and appropriate to minimize the potential for incidental take associated with this project.

This Opinion also serves as consultation on essential fish habitat pursuant to section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and its implementing regulations (50 CFR Part 600). NOAA Fisheries concluded that the proposed action may adversely affect designated EFH for Pacific salmon, groundfish and coastal pelagic species. As required by section 305(b)(4)(A) of the MSA, included are conservation recommendations that NOAA Fisheries believes will avoid, minimize, mitigate, or otherwise offset adverse effects on EFH resulting from the proposed action. As described in the enclosed consultation, 305(b)(4)(B) of the MSA requires that a Federal action agency must provide a detailed response in writing within 30 days after receiving an EFH conservation recommendation.



Questions regarding this letter should be directed to Chuck Wheeler of my staff in the Oregon Habitat Branch at 541.957.3379.

Sincerely,

for Michael R Couse

D. Robert Lohn
Regional Administrator

cc: Craig Tuss, USFWS

Endangered Species Act - Section 7 Consultation Biological Opinion

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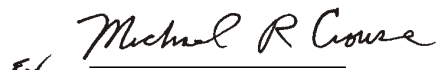
Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation

New River Temporary Breach Project,
Coos County, Oregon

Agency: Bureau of Land Management

Consultation
Conducted By: National Marine Fisheries Service,
Northwest Region

Date Issued: October 31, 2003

Issued by: 
D. Robert Lohn
Regional Administrator

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1. INTRODUCTION

1.1 Background

On July 22, 2003, NOAA's National Marine Fisheries Service (NOAA Fisheries) received a letter from the Bureau of Land Management (BLM) requesting formal consultation pursuant to section 7(a)(2) of the ESA, and EFH consultation pursuant to section 305(b)(2) of the MSA for the proposed New River Temporary Breach Project on the New River, Coos County, Oregon. Enclosed with the letter was a proposal describing the proposed action and potential effects that may result from project implementation. In the proposal, the BLM determined that the proposed action was likely to adversely affect Oregon Coast (OC) coho salmon (*Oncorhynchus kisutch*), an ESA-listed species.

The New River began forming after a large storm event in 1890. Sometime in the early 1900s European beach grass was introduced to stabilize the sand dunes next to the ocean. As the sand dunes grew larger, they became more difficult for small coastal streams to penetrate. Instead of each stream having its own entrance to the ocean, these streams ran northward behind the building foredune, becoming tributaries to each other. The mouth of New River has been migrating northward since about 1950, with New River lengthening behind the foredune.

The floodplain of Floras Creek, a part of the New River complex, has been converted to agriculture land that floods each year as the New River backs up behind the dunes. To alleviate the flooding of their pastures, ranchers breach the foredune each year on private land near Floras Creek to drain New River directly into the ocean. The breach site near Floras Creek has caused the river below this point to fill in with sediment and become very shallow. In 1985, BLM employees discovered the river had dried up between Hanson Slough and New Lake, causing considerable loss of salmon and steelhead juveniles (BLM 2003).

1.2 Consultation History

On June 18, 2003, BLM employees took NOAA Fisheries personnel on a trip through the New River area, which included Floras Creek and the proposed breach sites. A biological assessment (BA) was subsequently prepared by BLM on July 17, 2003, which was received by NOAA Fisheries on July 22, 2003. An environmental assessment (EA) and a finding of no significant impact were signed on July 31, 2003.

1.3 Proposed Action

The proposed action is to temporarily breach New River across the foredune to the ocean on BLM land between the New Lake outlet and the Croft Lake outlet. The temporary breach could occur annually, depending on storm events and flooding. Breaching will be carried out in two phases. Phase 1 includes pre-conditioning the selected breach site before winter rains. This involves creating a level, 50-foot wide channel with a sand plug on the ocean side of the foredune. The sand plug will remain to insure that high surf does not fill the channel in with

sand. Phase 2 will be removal of the sand plug if high water conditions exist, causing the river to breach across the foredune to the ocean.

1.4 Description of the Action Area

The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area (project area) involved in the proposed action (50 CFR 402.02). The direct effects occur at or beyond the project site based on the potential for upstream or downstream effects (*e.g.*, alteration of channel, loss of sediment supply to downstream gravel bars, alteration of stream channel morphology, increases in total suspended solids (TSS), and displacement, injury to, or killing of coho salmon) in the action area. Indirect effects may occur at or beyond the project site when the proposed action leads to additional activities that contribute to aquatic habitat degradation.

For this consultation, the action area is the New River from its mouth, upstream to the junction of Floras Creek and Floras Lake outlet stream, the tributary streams and their floodplains upstream to the top of tidewater, and the Pacific Ocean within 1000 feet of the proposed breach. High winter flows will be reduced from the mouth of the river to the proposed breach. The channel is expected to scour between the breach site and the junction of Floras Lake outlet stream. Sand from the breach area and the New River will be expected to deposit in the Pacific Ocean up to 1000 feet from the breach site.

2. ENDANGERED SPECIES ACT

2.1 Biological Opinion

This biological opinion (Opinion) considers the potential effects of the proposed action on OC coho salmon, which occur in the proposed action area. OC coho salmon were listed as threatened under the ESA on August 10, 1998 (63 FR 42587) and protective regulations were issued on July 10, 2000 (65 FR 42422). The objective of this Opinion is to determine whether the proposed action is likely to jeopardize the continued existence of OC coho salmon. This consultation is conducted pursuant to section 7(a)(2) of the ESA and its implementing regulations, 50 CFR 402.

2.1.1 Biological Information

NOAA Fisheries believes that all coho salmon stocks comprising the OC coho salmon evolutionarily significant unit (ESU) are depressed relative to past abundance. The OC coho salmon ESU is identified as all naturally-spawned populations of coho salmon in coastal streams south of the Columbia River and north of Cape Blanco (60 FR 38011, July 25, 1995). Biological information for OC coho salmon can be found in species status assessments by NOAA Fisheries (Weitkamp *et al.* 1995) and by the Oregon Department of Fish and Wildlife (Nickelson *et al.* 1992).

Abundance of wild coho salmon spawners in Oregon coastal streams declined from roughly 1965 to 1975, and has fluctuated at a low level since then (Nickelson *et al.* 1992). Spawning escapements for this ESU may be less than 5% of that in the early 1900s. Contemporary production of coho salmon may be less than 10% of the historic production (Nickelson *et al.* 1992). Average spawner abundance has been relatively constant since the late 1970s, but preharvest abundance has declined. Average recruits-per-spawner may also be declining. The OC coho salmon ESU, although not at immediate danger of extinction, may become endangered in the future if present trends continue (Weitkamp *et al.* 1995). Preliminary findings of the Biological Review Team (BRT 2003) indicate that the recent increase in spawner escapement levels are likely due to good ocean productivity while freshwater productivity continues to decline. Continued degradation of freshwater habitat that results in decreased productivity may lead to localized extinction during the next low ocean productivity cycle (BRT 2003).

The New River flows parallel to the Pacific Ocean along a foredune for about 10 miles. The River is low gradient with sand/silt bed and banks. From the junction of Floras Lake outlet stream to the junction of New Lake outlet stream, New River has a very flat slope and is wide and straight. Between the junction of New Lake outlet stream and the junction of Croft Lake outlet stream, the river has developed meanders and is stabilized by aquatic and riparian vegetation. Below the junction of Croft Lake outlet stream, the New River is tidally-influenced.

The action area does not have suitable spawning habitat. It is either tidally-influenced or does not have appropriate substrate. The entire action area is used as a migration corridor for juvenile and adult OC coho salmon. Juvenile OC coho salmon use the action area as rearing habitat for the first year, and then use it to acclimate to saltwater conditions when they are outmigrating. Adult coho salmon will migrate through the natural river mouth if no breach has occurred, but seem to prefer migrating through a breach (Scott Lightcap, BLM Fishery Biologist, personal communication, September 19, 2003). When a breach occurs, it stays open until flows recede in the spring or summer. The natural mouth of New River closes every summer whether a breach occurs or not.

2.1.2 Evaluating Proposed Action

The standards for determining jeopardy are set forth in section 7(a)(2) of the ESA as defined by 50 CFR 402.02 (the consultation regulations). In conducting analyses of habitat-altering actions under section 7 of the ESA, NOAA Fisheries uses the following steps of the consultation regulations and when appropriate combines them with the Habitat Approach (NOAA Fisheries 1999): (1) Consider the biological requirements of the listed species; (2) evaluate the relevance of the environmental baseline in the action area to the species' current status; (3) determine the effects of the proposed or continuing action on the species; and (4) determine whether the species can be expected to survive with an adequate potential for recovery under the effects of the proposed or continuing action, the effects of the environmental baseline, and any cumulative effects, and considering measures for survival and recovery specific to other life stages. In completing this step of the analysis, NOAA Fisheries determines whether the action under consultation, together with all cumulative effects when added to the environmental baseline, is

likely to jeopardize the ESA-listed species. If either or both are found step 5 occurs. In step 5, NOAA Fisheries may identify reasonable and prudent alternatives for the action that avoid jeopardy, if any exists.

The fourth step above requires a two-part analysis. The first part focuses on the action area and defines the proposed action's effects in terms of the species' biological requirements in that area (*i.e.*, effects on essential habitat features). The second part focuses on the species itself. It describes the action's effects on individual fish, or populations, or both, and places these effects in the context of the ESU as a whole. Ultimately, the analysis seeks to answer the questions of whether the proposed action is likely to jeopardize a listed species' continued existence

2.1.3 Biological Requirements

The first step in the methods NOAA Fisheries uses for applying the ESA section 7(a)(2) to listed salmon is to define the species' biological requirements that are most relevant to each consultation. NOAA Fisheries also considers the current status of the listed species taking into account population size, trends, distribution, and genetic diversity. To assess the current status of the listed species, NOAA Fisheries starts with the determinations made in its decision to list the species for ESA protection and also considers new data available that is relevant to the determination.

The biological requirements are population characteristics necessary for OC coho salmon to survive and recover to naturally-reproducing population levels, at which time protection under the ESA would become unnecessary. Adequate population levels must safeguard the genetic diversity of the listed stock, enhance its capacity to adapt to various environmental conditions, and allow it to become self-sustaining in the natural environment.

For actions that affect freshwater habitat, NOAA Fisheries usually describes the habitat portion of a species' biological requirements in terms of a concept called properly functioning condition (PFC). PFC is defined as the sustained presence of natural, habitat-forming processes in a watershed that are necessary for the long-term survival of the species through the full range of environmental variation (NOAA Fisheries 1999). PFC, then, constitutes the habitat component of a species' biological requirements. OC coho salmon survival in the wild depends upon the proper functioning of ecosystem processes, including habitat formation and maintenance. Restoring functional habitats depends largely on allowing natural processes to increase their ecological function, while at the same time removing adverse effects of current practices. For this consultation, the biological requirements are improved habitat characteristics that would function to support successful adult holding and migration, and juvenile rearing, smoltification, and outmigration.

2.1.4 Environmental Baseline

In step two of the analysis, NOAA Fisheries evaluates the relevance of the environmental baseline in the action area. Regulations implementing section 7 of the ESA (50 CFR 402.02)

define the environmental baseline as the past and present effects of all Federal, state, or private actions and other human activities in the action area. The environmental baseline also includes the anticipated effects of all proposed Federal projects in the action area that have undergone section 7 consultation, and the effects of state and private actions that are contemporaneous with the consultation in progress.

Land uses in the watershed include rural-residential, agricultural, commercial-industrial, and commercial forestry. Within the action area, private lands are used for livestock grazing and most of the public lands are protected as an Area of Critical Environmental Concern (ACEC). Riparian areas and stream channels in the action area have been damaged by cattle grazing and breaching in the past (BLM 2002, BLM 2003). The BLM initiated new grazing practices with local ranchers in 2002, and the streambanks are beginning to respond.

BLM data show that water temperatures in New River can reach 76°F during summer months. High temperatures are exacerbated in the middle reaches of the action area where stretches of warm, stagnant water often develop. BLM information (BLM 2003) suggests artificially high levels of nutrients may be entering the waters of New River. Nutrient addition, high temperatures, and low summer flows cause decreased levels of dissolved oxygen in the action area.

Habitat changes that have contributed to the decline of OC coho in the action area include: (1) Increased temperatures; (2) increased nutrients; (3) decreased channel bed scour due to breaching high flows; (4) loss or degradation of riparian vegetation; and (5) altered base and peak stream flows.

NOAA Fisheries concludes that not all of the biological requirements of the listed species within the action area are being met under current conditions. Based on the best available information on the status of OC coho salmon, including population status, trends, and genetics, and the environmental baseline conditions within the action area, significant improvement in habitat conditions is needed to meet the biological requirements of OC coho salmon for survival and recovery.

2.1.5 Analysis of Effects

2.1.5.1 Effects of Proposed Action

Juvenile and adult OC coho salmon may be stranded on the floodplain as the annual flood waters recede. The BLM indicated that it typically takes seven to ten days for a breach at the proposed site to relieve the flooding of nearby agricultural fields. If breached at the site near Floras Lake outlet stream, it takes three to four days to relieve the flooding.

Juvenile OC coho salmon may be swept out to sea when the foredune is first breached. The extent of juvenile use in New River during late fall and winter is unknown. If juveniles are in

the immediate vicinity of the breach, strong currents may flush them into the ocean where they would likely perish since they would not have acclimated to saltwater conditions.

When the sand plug is breached, a surge of water flows through the breach. This channel is gradually widened and deepened by the flowing water. Consequently, the channels upstream from the breach site also undergo deepening or downcutting. Large quantities of sand will be eroded from New River the first time the foredune is breached at the proposed site. This will create narrower, deeper channels with cooler temperatures in the summer, but will also have detrimental effects on the macroinvertebrate communities established within the substrate. Effects to macroinvertebrate communities are expected to be minimal after the first year and indistinguishable from pre-project levels. Sand from the river is expected to cover the ocean floor for up to 1000 feet from the breach site. This will have detrimental effects on the macroinvertebrate communities established in this area as well, although a rapid recovery to pre-breach levels is expected.

As with all construction activities, accidental release of fuel, oil, and other contaminants may occur. Operation of equipment requires the use of fuel, lubricants, *etc.*, which, if spilled into the channel of a waterbody or into the adjacent riparian zone, can injure or kill aquatic organisms. Petroleum-based contaminants, such as fuel, oil, and some hydraulic fluids, contain poly-cyclic aromatic hydrocarbons (PAHs), which can be acutely toxic to salmonids at high levels of exposure and can also cause chronic lethal and acute and chronic sublethal effects to aquatic organisms (Neff 1985).

2.1.5.2 Cumulative Effects

Cumulative effects are defined in 50 CFR 402.02 as “those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation.” Other activities within the watershed have the potential to impact fish and habitat within the action area.

NOAA Fisheries is not aware of any specific future non-federal activities within the action area that would cause greater effects to listed species than presently occurs. The action area includes significant tracts of private lands. Land use on these non-federal lands include rural development, agricultural, and commercial forestry. Chemical fertilizers or pesticides are used on many of these lands, but no specific information is available regarding their use. NOAA Fisheries does not consider the rules governing timber harvests, agricultural practices, and rural development on non-federal lands within Oregon to be sufficiently protective of watershed, riparian, and stream habitat functions to support the survival and recovery of listed species. Therefore, these habitat functions likely are at risk due to future activities on non-federal forest lands within the basin.

Between 1990 and 2000, the human population in Coos County increased by 4.2%.¹ NOAA Fisheries assumes that future private and state actions will continue within the action area, increasing as population density rises. As the human population in the county continues to grow, demand for actions similar to the subject project likely will continue to increase as well. Each subsequent action may have only a small incremental effect, but taken together they may have a significant effect that would further degrade the watershed's environmental baseline and undermine the improvements in habitat conditions necessary for listed species to survive and recover.

2.1.6 Conclusion

After reviewing the current status of OC coho salmon, the environmental baseline for the action area, the effects of the proposed action and its cumulative effects, NOAA Fisheries has determined that the New River Temporary Breach Project, as proposed, is not likely to jeopardize the continued existence of OC coho salmon. This conclusion is based on the following considerations: (1) Flood waters will recede off the floodplains slower than they would if the local landowners continue to breach New River near the junction of Floras Lake outlet stream; (2) macroinvertebrate communities are expected to re-colonize the affected areas of New River and the Pacific Ocean rapidly, and return to normal levels; (3) a spill control and countermeasures plan is required for use of heavy equipment; (4) as a result of this project, the quality of OC coho salmon habitat in New River is expected to be better than if the local landowners continue to breach New River near the junction of Floras Lake outlet stream; and (5) the proposed action is not expected to impair currently properly functioning habitats, appreciably reduce the functioning of already impaired habitats, or prevent or delay long-term progress of impaired habitats toward properly functioning habitat conditions essential to long-term survival and recovery at the population or ESU scale.

2.1.7 Reinitiation of Consultation

This concludes formal consultation on this action in accordance with 50 CFR 402.14(b)(1). Re-initiation of consultation is required: (1) If the amount or extent of incidental take is exceeded; (2) the action is modified in a way that causes an effect on the listed species or their habitats that was not previously considered in the biological assessment and this Opinion; (3) new information or project monitoring reveals effects of the action that may affect the listed species or habitat in a way not previously considered; or (4) a new species is listed or critical habitat is designated that may be affected by the action (50 CFR 402.16).

2.2 Incidental Take Statement

The ESA at section 9 [16 USC 1538] prohibits take of endangered species. The prohibition of take is extended to threatened anadromous salmonids by section 4(d) rule [50 CFR 223.203].

¹ U.S. Census Bureau, State and County Quickfacts, Coos County, Oregon. Available at <http://quickfacts.census.gov/qfd/states/41/41011.html>

Take is defined by the statute as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” [16 USC 1532(19)] Harm is defined by regulation as “an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavior patterns, including, breeding, spawning, rearing, migrating, feeding or sheltering.” [50 CFR 222.102] Harass is defined as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering.” [50 CFR 17.3] Incidental take is defined as “takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant.” [50 CFR 402.02] The ESA at section 7(o)(2) removes the prohibition from any incidental taking that is in compliance with the terms and conditions specified in a section 7(b)(4) incidental take statement [16 USC 1536].

2.2.1 Amount or Extent of Take

NOAA Fisheries anticipates that the action covered by this Opinion is reasonably certain to result in incidental take of juvenile OC coho salmon because of: (1) Stranding adult and juvenile OC coho salmon on the floodplains as flows recede; (2) entrainment of juvenile OC coho salmon during the breach and depositing them in the ocean; and (3) alteration of the macroinvertebrate communities within New River that rearing salmon feed on. The effects of these activities on population levels are not expected to be measurable in the long term, but despite the use of best scientific and commercial data available, NOAA Fisheries cannot quantify a specific amount of incidental take for this action. In instances such as this, NOAA Fisheries designates the expected level of take in terms of the extent of take allowed. For this project, NOAA Fisheries limits the area of allowable take to one mile upstream and downstream of the breach site in New River, 1000 feet from the breach site into the Pacific Ocean and the floodplains of the tributary streams within the action area. Incidental take occurring beyond these areas is not authorized by this consultation.

2.2.2 Reasonable and Prudent Measures

NOAA Fisheries believes that the following reasonable and prudent measure is necessary and appropriate to minimize take of the above species. Minimizing the amount and extent of take is essential to avoid jeopardy to the listed species.

1. Ensure completion of a comprehensive monitoring and reporting program to confirm this Opinion is meeting its objective of minimizing take from permitted activities.
2. Minimize the likelihood of incidental take from construction activities near watercourses by implementing hazardous materials pollution control measures.

2.2.3 Terms and Conditions

To be exempt from the prohibitions of section 9 of the ESA, the BLM must ensure compliance with the following terms and conditions, which implement the reasonable and prudent measure described above. These terms and conditions are non-discretionary.

1. To implement reasonable and prudent measure #1 (monitoring), the BLM shall ensure that:

- a. Salvage notice. The following notice is included as a permit condition.

NOTICE. If a sick, injured or dead specimen of a threatened or endangered species is found, the finder must notify the Vancouver Field Office of NOAA Fisheries Law Enforcement at 360.418.4246. The finder must take care in handling of sick or injured specimens to ensure effective treatment, and in handling dead specimens to preserve biological material in the best possible condition for later analysis of cause of death. The finder also has the responsibility to carry out instructions provided by Law Enforcement to ensure that evidence intrinsic to the specimen is not disturbed unnecessarily.

- b. Written planning requirements. Before beginning any work below bankfull elevation,² the permittee will provide a copy of the written plan for the spill control and countermeasures, to the Oregon Office of NOAA Fisheries at the following address. Plan requirements are described below.

Oregon State Director
Habitat Conservation Division
National Marine Fisheries Service
Attn: 2003/00926
525 NE Oregon Street
Portland, OR 97232

- c. Implementation monitoring report required. The permittee submits an implementation monitoring report to the BLM and to NOAA Fisheries, at the address below, within 120 days of completing all in-water work. The monitoring report will describe the permittee's success meeting his or her permit conditions.
 - i. If the in-water work will not be completed by January 31 following the year during which consultation was completed, the permittee shall submit

² 'Bankfull elevation' means the bank height inundated by a 1.5 to 2-year average recurrence interval and may be estimated by morphological features such average bank height, scour lines and vegetation limits.

- a report to the BLM and to NOAA Fisheries by January 31 saying why the in-water work was not complete.
- ii. If the monitoring report or explanation of why work was not completed is not received by the BLM and NOAA Fisheries by January 31, NOAA Fisheries may consider that a modification of the action that causes an effect on listed species not previously considered and causes the incidental take statement of the Opinion to expire.
 - iii. Submit a copy of the monitoring report or explanation of why work was not completed to the Oregon Office of NOAA Fisheries, at the address above.
- d. Implementation monitoring report contents. The monitoring report will include the following information.
- i. Project identification
 - (1) Permittee name, permit number, and project name.
 - (2) Project location, including any compensatory mitigation site(s), by 5th field HUC and by latitude and longitude as determined from the appropriate USGS 7-minute quadrangle map.
 - (3) BLM contact person.
 - (4) Starting and ending dates for work completed.
 - ii. Habitat conditions. Photos of habitat conditions at the project site or sites, before, during, and after project completion.³
 - (1) Include general views and close-ups showing details of the project and project area, including pre and post construction.
 - (2) Label each photo with date, time, project name, photographer's name, and a comment about the subject.
 - iii. Project data.
 - (1) Work cessation. Dates work ceased due to high flows, if any.
 - (2) Pollution control. A summary of pollution and erosion control inspections, including any erosion control failure, contaminant release, and correction effort.
 - (3) Sand plug removal. Volume of sand removed from breach site during phase I and phase II.
 - (4) Site restoration. Photo or other documentation or any site restoration completed.
 - (5) Reinitiation contact. To reinitiate consultation, contact the Oregon Office of NOAA Fisheries, at the address above.
2. To implement reasonable and prudent measure #2 (hazardous materials), the BLM shall ensure that the spill control and countermeasures plan developed for the project to prevent point-source pollution related to construction operations contains all of the

³ Relevant habitat conditions may include characteristics of channels, eroding and stable streambanks in the project area, riparian vegetation, water quality, flows at base, bankfull and over-bankfull stages, and other visually discernable environmental conditions at the project area, and upstream and downstream of the project.

pertinent elements listed below and meets requirements of all applicable laws and regulations.

- a. Place vehicle staging, maintenance, refueling, and fuel storage areas at least 150 feet horizontal distance from any stream or the Pacific Ocean.
- b. Inspect all vehicles operated within 150 feet of any stream or waterbody daily for fluid leaks before leaving the vehicle staging area. Repair any leaks detected before the vehicle resumes operation.
- c. Develop a spill containment and control plan with these components: Notification procedures; specific clean up and disposal instructions for different products; quick response containment and clean up measures; proposed methods for disposal of spilled materials; and employee training for spill containment.

3. MAGNUSON-STEVENSON ACT

3.1 Background

The MSA, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-297), requires the inclusion of essential fish habitat (EFH) descriptions in federal fishery management plans. In addition, the MSA requires Federal agencies to consult with NOAA Fisheries on activities that may adversely affect EFH.

EFH means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (MSA §3). For the purpose of interpreting the definition of essential fish habitat, “waters” include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate. “Substrate” includes sediment, hard bottom, structures underlying the waters, and associated biological communities. “Necessary” means the habitat required to support a sustainable fishery and the managed species’ contribution to a healthy ecosystem; and “spawning, breeding, feeding, or growth to maturity” covers a species’ full life cycle (50CFR600.110).

Section 305(b) of the MSA (16 U.S.C. 1855(b)) requires that:

- Federal agencies must consult with NOAA Fisheries on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH;
- NOAA Fisheries shall provide conservation recommendations for any federal or state activity that may adversely affect EFH;
- Federal agencies shall, within 30 days after receiving conservation recommendations from NOAA Fisheries, provide a detailed response in writing to NOAA Fisheries regarding the conservation recommendations. The response shall include a description of

measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on EFH. In the case of a response that is inconsistent with the conservation recommendations of NOAA Fisheries, the federal agency shall explain its reasons for not following the recommendations.

The MSA requires consultation for all actions that may adversely affect EFH, and does not distinguish between actions within EFH and actions outside EFH. Any reasonable attempt to encourage the conservation of EFH must take into account actions that occur outside EFH, such as upstream and upslope activities, that may have an adverse effect on EFH.

Therefore, EFH consultation with NOAA Fisheries is required by federal agencies undertaking, permitting or funding activities that may adversely affect EFH, regardless of its location.

3.2 Identification of EFH

Pursuant to the MSA the Pacific Fisheries Management Council (PFMC) has designated EFH for federally-managed fisheries within the waters of Washington, Oregon, and California. Designated EFH for groundfish and coastal pelagic species encompasses all waters from the mean high water line, and upriver extent of saltwater intrusion in river mouths, along the coasts of Washington, Oregon and California, seaward to the boundary of the U.S. exclusive economic zone (370.4 km) (PFMC 1998a, 1998b). Freshwater EFH for Pacific salmon includes all those streams, lakes, ponds, wetlands, and other waterbodies currently, or historically accessible to salmon in Washington, Oregon, Idaho, and California, except areas upstream of certain impassable man-made barriers (as identified by the PFMC 1999), and longstanding, naturally-impassable barriers (*i.e.*, natural waterfalls in existence for several hundred years) (PFMC 1999). In estuarine and marine areas, designated salmon EFH extends from the nearshore and tidal submerged environments within state territorial waters out to the full extent of the exclusive economic zone (370.4 km) offshore of Washington, Oregon, and California north of Point Conception to the Canadian border (PFMC 1999).

Detailed descriptions and identifications of EFH are contained in the fishery management plans for groundfish (PFMC 1998a), coastal pelagic species (PFMC 1998b), and Pacific salmon (PFMC 1999). Casillas *et al.* (1998) provides additional detail on the groundfish EFH habitat complexes. Assessment of the potential adverse effects to these species' EFH from the proposed action is based, in part, on these descriptions and on information provided by the BLM.

The project area includes habitat which has been designated as EFH for various life stages of 25 species of groundfish and coastal pelagics, and two species of Pacific salmon (Table 1).

3.3 Proposed Actions

The proposed actions are detailed above in section 1.2 of this Opinion. The action area includes the New River and its' tributaries. The action area includes habitats that have been designated as

EFH for various life-history stages of 20 species of groundfish, 5 coastal pelagic species, and two species of Pacific salmon (Table 1).

3.4 Effects of Proposed Action

As described in detail in section 2.1.5 of this Opinion, the proposed action may result in adverse effects to habitat parameters. These adverse effects are:

- Stranding - The potential exists to strand juvenile and adult OC coho salmon upon the floodplain as the flood flows recede.
- Entrainment - The potential exists for juvenile OC coho salmon to be swept out to sea when the foredune is first breached.
- Macroinvertebrates - the channels upstream from the breach site also undergo deepening or downcutting. This will have detrimental effects on the macroinvertebrate communities that are established within the substrate.
- Chemical Contamination - As with all construction activities, accidental release of fuel, oil, and other contaminants may occur during the construction phase, adversely affecting water quality.

3.5 Conclusion

NOAA Fisheries concludes that the proposed action will adversely affect EFH for Pacific salmon, groundfish and coastal pelagic species.

3.6 EFH Conservation Recommendations

Pursuant to section 305(b)(4)(A) of the MSA, NOAA Fisheries is required to provide EFH conservation recommendations to Federal agencies regarding actions which may adversely affect EFH. While NOAA Fisheries understands that the conservation measures described in the biological assessment will be implemented by the BLM, it does not believe that these measures are sufficient to address the adverse impacts to EFH described above. However, the terms and conditions outlined in section 2.2.3 are applicable to EFH and address adverse effects. Consequently, NOAA Fisheries incorporates them here as EFH conservation recommendations.

3.7 Statutory Response Requirement

Pursuant to the MSA (§305(b)(4)(B)) and 50 CFR 600.920(j), Federal agencies are required to provide a detailed written response to NOAA Fisheries' EFH conservation recommendations within 30 days of receipt of these recommendations. The response must include a description of measures proposed to avoid, mitigate, or offset the adverse impacts of the activity on EFH. In the case of a response that is inconsistent with the EFH conservation recommendations, the

response must explain the reasons for not following the recommendations, including the scientific justification for any disagreements over the anticipated effects of the proposed action and the measures needed to avoid, minimize, mitigate, or offset such effects.

3.8 Supplemental Consultation

The BLM must reinitiate EFH consultation with NOAA Fisheries if the proposed action is substantially revised in a manner that may adversely affect EFH, or if new information becomes available that affects the basis for NOAA Fisheries' EFH conservation recommendations (50 CFR 600.920(k)).

Table 1. Species with designated EFH in the Estuarine EFH Composite in the State of Oregon

Groundfish Species	
Leopard Shark (southern OR only)	<i>Triakis semifasciata</i>
Soupfin Shark	<i>Galeorhinus zyopterus</i>
Spiny Dogfish	<i>Squalus acanthias</i>
California Skate	<i>Raja inornata</i>
Spotted Ratfish	<i>Hydrolagus colliei</i>
Lingcod	<i>Ophiodon elongatus</i>
Cabezon	<i>Scorpaenichthys marmoratus</i>
Kelp Greenling	<i>Hexagrammos decagrammus</i>
Pacific Cod	<i>Gadus macrocephalus</i>
Pacific Whiting (Hake)	<i>Merluccius productus</i>
Black Rockfish	<i>Sebastes maliger</i>
Bocaccio	<i>Sebastes paucispinis</i>
Brown Rockfish	<i>Sebastes auriculatus</i>
Copper Rockfish	<i>Sebastes caurinus</i>
Quillback Rockfish	<i>Sebastes maliger</i>
English Sole	<i>Pleuronectes vetulus</i>
Pacific Sanddab	<i>Citharichthys sordidus</i>
Rex Sole	<i>Glyptocephalus zachirus</i>
Rock Sole	<i>Lepidopsetta bilineata</i>
Starry Flounder	<i>Platichthys stellatus</i>
Coastal Pelagic Species	
Pacific Sardine	<i>Sardinops sagax</i>
Pacific (Chub) Mackerel	<i>Scomber japonicus</i>
Northern Anchovy	<i>Engraulis mordax</i>
Jack Mackerel	<i>Trachurus symmetricus</i>
California Market Squid	<i>Loligo opalescens</i>
Pacific Salmon Species	
Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Coho Salmon	<i>Oncorhynchus kisutch</i>

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